

REMARKS

Claims 1-51 and 61-89 are pending in the application. Claims 1, 19, 35, 40, 45, and 47 are being amended. Support for these amendments can be found at least on page 9, lines 15-21; page 19, lines 7-9; and FIG. 1 of the Specification, as originally filed. No new matter is being introduced by way of this Amendment.

Regarding § 103 Rejection

Claims 1-7, 11-16, 18-24, 28-30, 32, 33, 35, 36, 38, 39-41, 43-48, 50, 51, 62, 64, 66, 68, 70, 72, 74-79, and 84-89 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Primak et al. (Pub. No. 2001/0039585), hereinafter "Primak" in view of Logan et al. (USPN 6,578,066), hereinafter "Logan."

Applicant's claim 1 as amended in the Claim Listing above recites, in part:

a central server that maintains server selection weights, and, based on the weights, provides in response to a client request a candidate server list of at least two candidate servers to a network node, other than the central server, adapted to interrogate individual servers represented in the candidate server list, the central server receiving feedback from the interrogated individual servers indicating service by the individual servers in response to client requests and modifying the server selection weights based on the feedback,

where the underlined text indicates elements added by way of amendment.

Briefly, in Applicant's amended claim 1, in reference to FIG. 1, in Step 1, a client makes a request to a central server. In Step 2, the central server returns to the client a candidate server selection list. In Steps 3 through 6, the client interrogates candidate servers in the candidate server selection list to select a candidate server optimizing at least one service criterion. In Step 7, the client accesses the selected server. The selected server services the client's requested service. A service_counter in the selected server is then incremented by the selected server. Because a service_counter is incremented by a server, and not the client, in Step 8, each server reports its service_counter to the central server. In this way, from the service_counter that is reported back (i.e., feedback) from the interrogated candidate servers, the central server tracks the number of times each server has been selected and updates a vector of server selection

probabilities used to bias or influence random selection of candidate server addresses to be returned to the requesting client in the candidate server selection list of Step 2. Specification, page 7 line 5 – page 9 line 27. As such, Applicant’s amended claim 1 receives feedback (service_counter) from the interrogated servers, not from the client interrogating the servers.

This is in stark contrast to Primak’s FIG. 4 where a DNS agent (network node adapted to interrogate individual servers) after receiving and evaluating ping responses (interrogation), the DNS agent (network node) transmits (feeds back) the round-trip time and error rate value for the client path to a DNS (central server). Primak, paragraph [0028]. Contrary to Applicant’s explicit recitation in claim 1, Primak describes receiving feedback from a network node which interrogates, as opposed to an interrogated network node.

Moreover, Primak provides no motivation or suggestion for receiving feedback from an interrogated network node. Primak describes the DNS agent (interrogating network node) evaluating the response to its ping to determine the error rate value for its client path, i.e., the connection between the gateway and the server cluster on which the originating DNS agent resides (the server cluster and gateway combination). Primak, paragraph [0028]. As such, the gateway (interrogated network node) simply lacks any information with which to feedback.

Accordingly, Primak neither teaches nor provides motivation for Applicant’s amended claim 1 of “the central server receiving feedback from the interrogated individual servers indicating service by the individual servers in response to client requests and modifying the server selection weights based on the feedback.” Applicant respectfully submits claim 1 as amended should be allowed. Additionally or alternatively, claim 1 should be allowed for the reasons provided below.

The Office Action dated February 26, 2007 states, on page 3, "Primak does not specifically returning [sic] a candidate list of at least two candidates back to a DNS from the central server. Applicant agrees. The Office Action cites Logan as providing the missing disclosure. In particular, the Office Action states of page 3, "it would have been obvious to one of ordinary skill in the art for the DNS server of Primak to utilize an ordered list returned by the network switch of Logan in order to provide the network switch the ability to direct the client's service to a particular geographic site, thereby saving bandwidth and reducing unnecessary delays relative to the client as supported by Logan." Applicant respectfully disagrees because

the proposed combination of Primak and Logan would "change the principles of operation" of the Primak reference. *See MPEP 2143.01 VI.*

Primak describes selecting a connection from a client gateway to a server cluster ("client path") with the lowest round-trip time and error rate ("client connection values") from among several client gateway and server cluster combinations. Primak, paragraphs [0028]-[0029] in reference to FIGS. 4, 6, and 7. That is, Primak is concerned with making a selection that is preferred by a client, namely, a client path with the best client connection values. In this way, the operating basis of Primak is client preference.

Logan, on the other hand, describes (in reference to Tables 1-3) selecting a site that is preferred by the greatest number of peer sites. In Table 1, each peer site of the set of sites tests each other for responsiveness. That is, site A tests peers sites B-E, site B tests peers sites A and C-E, and so on. As such, the "times [of Table 1] are with respect to each site's point of view" (Logan column 7, lines 26-27) and not from a client's point of view. In fact, Logan only measures site-to-site connections; there is no indication of measuring a client-to-site connection.

Next in Logan's Table 2, each site is listed in order of preference from each peer site's perspective, and not from a client's perspective. For example, from site A's perspective, peer site D is most preferred and peer site E is least preferred, but, from site C's perspective, peer site F is most preferred and peer site D is least preferred.

Finally, in Logan's Table 3, each site is weighted based on the number of times a site was first preferred, second preferred, etc. by its peers. Again, the determination is made from the perspective of the sites, not from the client's point of view. Accordingly, in stark contrast to Primak, Logan describes selecting a site that is preferred by its peers.

Consequently, combining Primak's selecting a server cluster that is preferred by a client with Logan's selecting a site that is preferred by peer sites changes the basic operation of Primak. In particular, the combination requires changing Primak's selecting based on client preference to include peer site preferences. Additionally, the combination causes Primak's selecting a server cluster that is preferred by a client to fail for its particular purpose because it requires the selection not to be made based a client preference. Lastly, such a combination requires significant modification to Primak. In particular, a way for correlating client preference

to peer site preference must be added to Primak, and developing a correlating technique would require extensive research and experimentation.

Accordingly, Applicant respectfully submits there is no motivation or suggestion to modify the Primak reference with the Logan reference, and, thus, the Office Action fails to make a *prima facie* case for obviousness.

Lastly, Primak does not disclose a DNS server separate from a central server. See Primak, FIG. 7. In fact, the Office Action relies on quite the opposite to find all elements of Applicant's claimed invention. Office Action, page 3 ("...since the central server is part of the DNS server, it inherently forwards [a client request] to the [DNS] server..."). Even if Primak's DNS server was modified separating the functionality of the DNS server from the central server, Applicant respectfully submits Primak is not the same as or make obvious Applicant's invention as claimed in Claim 1 ("...the central server receiving feedback from the interrogated individual servers indicating service by the individual servers...").

Independent claims 19, 35, 40, 45, and 47 have similar limitations and should be allowed for similar reasons as presented above.

Claims 2-7, 11-16, 18, 20-24, 28-30, 32, 33, 36, 38, 39, 41, 43-44, 46, 48, 50, 51, 62, 64, 66, 68, 70, 72, 74-79, and 84-89 should be allowed for the same reasons as the independent claims from they depend.

Claims 17, 34, and 80 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Primak in view of Logan in view of Meek et al. (USPN 6,539,426), hereinafter "Meek."

Because claims 17, 34, and 80 depend from the independent claims, the above remarks apply. Therefore, because these claims depend from the independent claims, Applicant respectfully submits they should be allowed for at least the same reasons.

Claims 8-10, 25-27, 37, 42, 49, 73, and 81-83 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Primak in view of Logan in view of Guenthner et al. (USPN 6,134,588), hereinafter "Guenthner."

Because claims 8-10, 25-27, 37, 42, 49, 73, and 81-83 depend from the independent claims, the above remarks apply. Therefore, because these claims depend from the independent claims, which were not rejected under 35 U.S.C. § 103(a), Applicant respectfully submits they should be allowed for at least the same reasons.

Claims 61, 63, 65, 67, 69, and 71 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Primak in view of Logan in view of Lin (USPN 6,298,451).

Because claims 61, 63, 65, 67, 69, and 71 depend from the independent claims, the above remarks apply. Therefore, because these claims depend from the independent claims, which were not rejected under 35 U.S.C. § 103(a), Applicant respectfully submits they should be allowed for at least the same reasons.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims after entry of this amendment, claims 1-51 and 61-89, are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Mark B. Solomon
Mark B. Solomon
Registration No. 44,348
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Date: 5/24/07